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Biotechnology

Bt Corn Gets Good Reviews

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Report Highlights:

The influential French daily newspaper, "Le Figaro" recently published an article entitled "Surveys restore confidence in biotech corn." This article details the conclusions drawn from a research study conducted by the University of Minnesota and the French National Institute of Agricultural Research (INRA). This study concludes that the probability for corn borers to develop resistance to Bt corn is very low even in regions where Bt corn is produced on a large scale. Accordingly, Bt corn is harmless to monarch butterflies. The main conclusion of the research study is that Bt corn is basically harmless. Thus, "Le Figaro" article puts forward a statement to its readers favoring biotech corn production in France. This is an encouraging development.

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In mid-April, the influential daily newspaper *Le Figaro* ran a half-page article in favor of biotech corn. The article is a synopsis of the results of several research studies conducted simultaneously in France and the United States. The main research conclusion is that Bt corn is basically harmless. In France, this is a positive development supporting biotech in agriculture.

1. Corn Borer Resistance Rate to Bt Corn is Very Low

The article first indicates that the probability of the appearance of corn borers resistant to Bt corn is very low. Over a two-year period, Denis Bourguet (INRA) and David Andow (University of Minnesota) analyzed corn borers from the U.S. Corn Belt, where Bt corn is grown on a large scale, and corn borers from southwestern France, where little Bt corn is grown. The results were recently published in *Theoretical Applied Genetics*. The conclusion was that the risk of developing a Bt corn resistant corn borer was one out of a million.

Moreover, *Le Figaro*'s article quoted INRA's scientists Guy Riba and Denis Bourget, stating that with such a low probability, stopping Bt corn production for a year and replacing it by conventional corn production treated with insecticides would stop corn borer resistance if it did appear. Riba further explained that, since there is just one generation of corn borer per year in France, compared to three generations in the United States, and seven in China, the French have a longer time period to fight against any corn borer resistance to Bt corn.

2. Bt Corn is Harmless for Monarch Butterflies

Le Figaro's article also points to French readers studies published in *Proceedings of the National Academy of Sciences* in September 2001, which demonstrated that Bt corn is harmless to monarch butterflies, unlike the famous survey published three years ago in *Nature*. Morevover, *Le Figaro*'s article mentioned that the INRA scientist and researcher, Denis Bourguet, is going to publish another scientific paper in *Environmental Biosafety Research* demonstrating the absence of collateral impact of Bt corn on non target insects.

Le Figaro quoted Bourguet, who pointed out that monarch larvae do not live on corn but on another plant (asclepiade) in or surrounding corn fields. Consequently, they are more affected by insecticide treatments made by planes or helicopters as usually done in the United States than by the Bt toxin present in Bt corn. Another scientist, Guy Riba added that producing Bt corn varieties would prevent corn growers from using chemical insecticides on 600.000 hectares of corn in France.